CEA
Consumer Electronics Association 2500 Wilson Boulevard Arlington, VA 22201-3834 USA Tel 703 907 7600 Fax 703 907 7601 www.CE.org

November 30, 2000

Magalie Roman Salas, Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Re: Written *Ex Parte* Presentation: PP Docket No. 00-67 (Compatibility Between Cable Systems And Consumer Electronics Equipment)

Dear Secretary Salas:

The Consumer Electronics Association ("CEA") is pleased to respond to the requirement of the Commission for a report on the progress in implementing the agreements of February 22, 2000 made between CEA and the National Cable Television Association ("NCTA") regarding compatibility between cable systems and consumer electronics equipment.[1] Those agreements consisted of two documents: a technical agreement addressing direct connection of television receivers to the RF output of cable systems, and an agreement addressing carriage of PSIP (Program and System Information Protocol) over cable plant. In addition, CEA will use this opportunity to report on progress in the development of POD (point of deployment) security module interface standards, which is substantially related to implementation of the February 22 agreements.

While CEA has completed its part of the standardization process, little work has been done to provide a final build-to standard for the POD host device; or to ensure that PSIP information can pass through the cable chain. Although related standards-setting activity has moved forward in both the cable and consumer electronics industries, there has been scant progress in actual implementation of the general substance of these agreements or in the further technical work required to plan the detailed aspects of implementation. CEA believes that a primary reason for the lack of progress is a breakdown in the collaborative process that once linked the cable and consumer electronics industries in the pursuit of compatibility solutions. Specifically, representatives of the cable industry have made it clear that they will

1 *See Compatibility Between Cable Systems and Consumer Electronics Equipment*, FCC 00-342, PP Docket No. 00-67, ¶¶ 34-36 (rel. Sept. 15, 2000); *see also* Erratum in PP Docket No. 00-67 (OET rel. Oct. 25, 2000) (setting forth reporting requirements).

no longer participate in a meaningful way in the Cable-Consumer Electronics Compatibility Advisory Group ("C[3]AG") or in the Joint (CEA/NCTA) Engineering Committee ("JEC"), a standards-setting consultative body.[2] The result is that there is no longer any formalized mechanism for inter-industry consultations on compatibility issues, for purposes of either a dialog on basic policy matters or technical discussions aimed at coordinated standards solutions.[3] CEA finds it ironic that the cable industry appears to have abandoned the C[3]AG-JEC mechanism in preference for the process selected by the Commission for the development of specifications for navigation devices, the so-called "OpenCable" process directed by CableLabs, the research and engineering arm of several major cable MSOs (multiple systems operators). The deficiencies of that process have been explained by CEA and others in the navigation devices proceeding, CS Docket No. 97-80, and need not be reiterated here except to make note that a process controlled by the cable industry alone cannot adequately replace the joint, inter-industry consultative mechanism that was manifest in C[3]AG. Recently, however, representatives of CEA and SCTE (Society of Cable Telecommunications Engineers) met for consultations on joint standards-setting activities. CEA is hopeful that these discussions will produce a framework to encourage consensus on technical solutions and to enable coordinated standards development in the future.

CEA has moved forward in the standard-setting area even without an effective inter-industry consultative mechanism. On May 19, 2000, CEA adopted EIA/CEA-818-A, a standard setting forth minimum requirements for television receivers connected to uni-directional cable services, as well as complementary minimum requirements for receiver-compatible digital cable systems. EIA/CEA-818-A revised the existing standard to conform to the CEA/NCTA technical agreement. More recently, on November 10, 2000, CEA adopted EIA/CEA-819, a standard similar in scope to EIA/CEA-818-A, but addressing two-way, "interactive" cable services, such as video-on-demand, interactive shopping and audience opinion polling.[4] Of course, to be effective, these standards require complementary standards to be developed by the cable industry regarding transmission standards for cable services.

There has been a measure of progress from the cable industry in the standardization area. Revision 3 of the DVS-313, which sets forth a standard for digital cable services (the SCTE version of many of the specifications set forth in the EIA/CEA-818-A standard), is

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2 The JEC adopted EIA-679 (NRSS, National Renewable Security Standard) Parts A and B.

3 Representatives of CEA and its member companies have participated in the SCTE standard-setting process, as cable representatives have participated in CEA's standards deliberations, although the cable industry did boycott the development of EIA/CEA-819, the standard describing minimum requirements for direct connection of television receivers to two-way cable services.

4 The foreword to EIA/CEA-819 makes it clear that "[s]upport for these and other advanced services requires the development of new protocols and standards which are outside the scope of the current specification."

currently out for ballot and may be adopted by the SCTE in the near future. CEA has coordinated its development of EIA/CEA-818-A and EIA/CEA-819 with SCTE in an attempt to ensure common functionalities in standards developed in both venues. CEA stands ready to adapt EIA/CEA-818-A and EIA/CEA-819 to conform to this cable industry standard – *i.e.*, to stand ready to participate in a process with NCTA to conform and update the February 22 technical agreement.

The absence of significant effort on the part of the cable industry to implement the CEA-NCTA agreements is most evident in the area of electronic program guides ("EPGs"). Although at the time the PSIP carriage agreement was reached on February 22, many of the standards were in place or nearly in place to effect the solution described in that agreement, there has been no discernible movement toward implementation. There has been no commitment by any of the major content providers to ensure the availability of the information for which the February 22 agreements created carriage requirements, even though a significant number of these content providers are owned, controlled or substantially influenced by the MSOs represented by NCTA. Nor is CEA aware of any significant developments in the cable infrastructure areas identified in the PSIP agreement as those where further technical work and system design were needed: content re-encoding, PSIP injection into uplink encoders, remultiplexing, and master downlinks feeding multiple cable systems utilizing varying channel maps.

This absence of progress on implementation of the PSIP agreement prevails at a time when many MSOs are engaged in major upgrades of their infrastructure to make possible the delivery of enhanced electronic program guides. Such EPGs, however, are made possible through the use of proprietary technologies to transmit out-of-band system information ("SI") to cable operator-supplied set-top boxes in a manner not currently replicable by the use of receiver designs relying on open standards.

The deployment of parallel, proprietary technologies that far outpace any progress on implementation of the February 22 agreements or development of mutually compatible cable systems and receivers is highlighted by the situation affecting deployment of POD security modules. Despite the claims by the cable industry of having deployed a "functioning" POD by the July 1, 2000 deadline established by the Commission's navigation devices rules, no functioning PODs or host device for the PODs can yet be designed. The device demonstrated by CableLabs was capable only of descrambling scrambled programming, and could not support any other features of the host device such as EPG. SCTE's DVS-295 and DVS-301 (the latter addresses copy protection protocols) are still many weeks away from the ballot process and months more away from consensus-seeking negative ballot resolution. This delay is significant because these standards will affect and require modifications to all the standards CEA has discussed above, as well as many of the standards referenced therein, and to the standards upon which the February 22 agreements were keyed. The upshot is that ***it is currently impossible to design a digital television receiver that will be compatible with cable systems utilizing the POD-Host interface***, because the parameters of that interface are not fully and finally determined. Meanwhile the deployment of digital set-top boxes that ignore the PHI (or include it only as an unessential add-on), and demote digital consumer electronics equipment to the status of monitors and nearly-manual passive recording

equipment, continues unabated. This is occurring despite the fact that the consumer electronics industry yielded long before to cable industry demands for expanded functionalities to be included within the receiver to make possible their direct connection to cable systems and the provision of a variety of advanced services delivered through compatible host receivers.

CEA believes that the instant reporting requirement serves a useful purpose to alert the Commission formally to the obstacles remaining toward development of mutually compatible digital cable systems and consumer electronics equipment. CEA welcomes a more active role for the Commission in oversight and monitoring of the compatibility standardization process and, even more importantly, implementation of such standards by cable operators to ensure that consumer electronics equipment designed to such standards will be fully functional and interoperable. CEA is disappointed yet undaunted by the lack of progress thus far in this process. It remains confident that the Commission will not be swayed by arguments that standardization to achieve compatibility is premature, or will tend to "freeze" technology in an immature state of the art – the standards discussed herein set forth minimum requirements, are fully scalable and extensible, and can accommodate incremental improvements in technology on an on-going basis. Nevertheless, given the absence of progress in standardization thus far, the apparent reluctance on the part of the cable industry to pursue and implement compatibility solutions expeditiously, and the imperatives of the consumer product design, testing and verification processes, the Commission must be made aware that production and marketing of digital television receivers that will be fully compatible with digital cable systems cannot begin until the cable industry produces a final build-to standard for manufacturers' use.

The Commission should recognize that a truly "open" system which bypasses the ability of individual cable MSOs to fully control their customers' user interface (especially the program selection process) may not be viewed by the MSOs as being in the commercial best interest. That being the case, the cable industry has an enormous incentive for pursuing proprietary solutions with more energy and vigor than open solutions. That being the case, the Commission can do much to ensure that the road to compatibility is no longer than it has to be.

To begin with, it can promote an inter-industry collaborative process, such as that which existed with C^3AG, so that an "open channel" for CE-cable dialog remains in place. It can direct the cable industry, through letters to MSO CEOs or by other means, to explain why it has dragged its heels in the development of compatibility standards for two-way cable services. Further, the Commission may consider setting timelines for the cable industry to benchmark its progress on this standards process and that for the POD-Host interface. Finally, it can begin the administrative process for incorporation of compatibility standards into its rules – including standards that will affect the system design and infrastructure of cable systems – as the only sure way to meet the congressional mandate established more than eight years ago to allow American consumers to maximize the potential of both the cable service to which they subscribe and the

consumer electronics equipment they acquire to access that service. To do less allows the possibility for failure to achieve cable-consumer electronics compatibility, to the detriment of the public interest.

Sincerely,

Michael Petricone
Vice President, Technology Policy
Consumer Electronics Association
2500 Wilson Boulevard
Arlington, VA 22201
(703) 907-7600

CC: The Commissioners
Deborah Lathen, Cable Services Bureau
William Johnson, Cable Services Bureau
Deborah Klein, Cable Services Bureau
Steven Broeckaert, Cable Services Bureau
Dale Hatfield, Office of Engineering & Technology
Bruce Franca, Office of Engineering & Technology
Alan Stillwell, Office of Engineering & Technology
Robert Pepper, Office of Plans and Policy
Jonathan Levy, Office of Plans and Policy
Amy Nathan, Office of Plans and Policy